# AREA OF FOCUS #10

# Urinary Tract Disease

Urinary tract infections (UTIs) are a major public health problem in adult women of all ages.

UTIs are particularly problematic in women with type 2 diabetes mellitus, and as a consequence of the greater prevalence of diabetes in minority women, the health burden consequent to UTIs is much greater in minority populations.

In diabetic women, UTIs are more frequent and more difficult to eradicate. In addition, UTIs adversely impact glycemic control and, therefore, may contribute to diabetic complications.

Urinary incontinence is a major public health problem and contributes to the large health care expenditure and concern in the United States. Racial disparities in incidence, age of onset, access to care, and effective medical and surgical therapy have never been carefully assessed. An NIDDK pilot study looking at the epidemiology and racial/ethnic differences of urinary incontinence in young to middle-age adult women in inner-city Detroit, Chicago, and Raleigh, North Carolina, showed a significant disparity in understanding of incontinence, treatment seeking, access to care, and provision of effective treatment.

Incontinence is a major factor contributing to the difficulty in providing health care to the elderly. It is unclear whether or not there are racial/ethnic disparities in the incidence of incontinence in the elderly, but the burden of care falls more heavily on minority family members, since elderly minority individuals are cared for more frequently by families rather than in nursing homes.

## **Research Goal 1**

To prevent the incidence of urinary tract infections and reduce the racial disparity

#### **Current Activities**

The portfolio in this area includes a study focusing on risk factors for UTIs in post-menopausal women, two program project grants, and a series of individual research project grants that focus primarily on pathogenic mechanisms for UTIs, factors promoting infections, and immunization for UTIs. Total funding for FY 1999 was approximately \$3.75 million.

#### **Potential New Initiative**

Initiate a multicenter clinical study focusing on the effectiveness of strategies to reduce recurrent urinary tract infections in women with type 2 diabetes. Studies would examine the effect of diabetes control, bladder function, home testing for infection, prophylactic antibiotics, and, possibly, alternative medicine remedies such as cranberry juice. It will be critical that there be study sites in communities of racial/ethnic minorities, including American Indians, Hispanic/ Latino Americans, and African Americans, so that effectiveness of treatments in these populations can be assessed. Coordination with the **Indian Health Service and the NIDDK Phoenix Epidemiology and Clinical Research Branch** in Phoenix, Arizona, will allow recruitment of an appropriate American Indian population.

#### **Expected Outcome**

If successful, the results of this study may establish methods to prevent urinary tract infections in diabetic minority women.

#### **Action Plan**

The anticipated mechanism of funding is Cooperative Agreement (U01). Some of the studies can be carried out in the Intramural program. Collaboration with the Indian Health Service is also expected.

#### **Research Goal 2**

To reduce the prevalence of urinary incontinence in the general population and address the racial disparity

#### **Current Activities**

In FY 1999, NIDDK funded two individual research grants focusing on stress incontinence and incontinence secondary to vaginal delivery. Another ongoing study focuses on hormonal risk factors for incontinence. Total amount of funding for FY 1999 was \$1 million. In FY 2000, a major study of surgical outcomes for urinary incontinence was initiated. At the present time, no mechanisms exist for selective minority recruitment in that study.

# **Potential New Initiative**

Increase the scope and number of centers participating in the study of surgical outcomes for treatment of urinary incontinence to ensure adequate minority recruitment and enrollment and develop a population-based cohort study within the recruited population to answer the outstanding questions related to racial disparities.

#### **Expected Outcome**

The expansion of the urinary incontinence treatment trial will allow us to answer many of the outstanding questions related to access to care, racial and ethnic differences in types of incontinence, age of onset, and the effective treatment in minority, community-dwelling women.

#### **Action Plan**

The anticipated mechanism of funding is cooperative agreement (U01).

# **Public Information and Outreach Goal**

To increase awareness about urinary tract infections and urinary incontinence in African American and Hispanic/Latino American audiences

#### **Current Activities**

Under NIDDK's direction, the National Kidney and Urologic Diseases Information Clearinghouse produces and disseminates relevant materials in English and Spanish, including *Urinary Tract Infections in Adults, Urinary Tract Infections in Children,* and *Bladder Control for Women.* Under development is an easy-to-read booklet on urinary tract infections.

## **Potential New Initiatives**

Coordinate an information program to reach minority populations disproportionately affected by urinary tract disease.

#### **Action Plan**

Work with CDC and other public and private partners representing minority organizations to identify additional information needs of patients, families, and physicians and plan and develop culturally sensitive messages and materials.